# Gray Wolf Population 2002-2003

By Adrian P. Wydeven and Jane E. Wiedenhoeft

## **Abstract**

The Wisconsin wolf population count in late winter 2003 was 335 -353 wolves including 94 packs and 12 loners. A total of 328+ wolves occurred outside of Indian reservations, thus the population had exceeded the threshold of 250+ needed for state delisting two years in a row. The wolf population had increased 2.4% from 327 in 2002. Wolf packs occurred in 30+ counties and wolf observations were reported for 38 counties, with highest rates reported for Vilas, Iron, Bayfield and Douglas counties.

#### **Introduction**

Gray wolves recolonized Wisconsin in the mid 1970's after being extirpated from the state for about 15 years. In 1975 wolves were classified as state endangered and in 1999 they were downlisted to threatened. Monitoring of the state wolf population has been an important strategy of the 1989 recovery plan, and the 1999 State Wolf Management Plan. Annual surveys have been ongoing since 1979. The 1999 state management plan set a state delisting goal of 250 wolves in the state outside of Indian reservations. In 2002 over 250 wolves were counted in Wisconsin outside of Indian reservations (Wydeven and Wiedenhoeft 2002), and because this population was maintained into 2003, state delisting can begin soon.

The U. S. Fish and Wildlife Services listed wolves in Wisconsin as federally endangered in 1974, and in April 2003 reclassified wolves to threatened in Wisconsin and other locations. The federal and state reclassification goal for Wisconsin was 80 wolves for 3 years, and this criteria was initially achieved in 1997. Because federal reclassification was tied into reclassification and delisting concerns of gray wolves throughout the U.S., it took longer to complete the process. Federal delisting of wolves in Wisconsin should begin later in 2004. The current report covers the Wisconsin DNR wolf monitoring activity in 2002 and portions of 2003.

#### Method

Wolf numbers were surveyed by live trapping/radio tracking (Mech 1974, Fuller and Snow 1988), howling surveys (Harrington and Mech 1982), and winter track surveys (Thiel and Welch 1981, Wydeven et al. 1996). Track surveys were conducted in areas where large blocks of suitable habitat exist (Mladenoff et al. 1995) or areas where wolves had been reported. Additional information on wolf abundance and distribution were obtained from "Rare Mammal Observation Cards" reported by agency personnel or the general public (Wydeven 1992).

#### **Results and Discussion**

The minimum count of 335 -353 wolves was detected in Wisconsin in late winter 2002-2003 (Table 1). Ninety-four packs occurred in 20 northern Wisconsin and 10 central Wisconsin counties (Figure 1, Table 2). Average pack size for 79 packs in northern Wisconsin was 3.5 –3.7 wolves and 2.9 to 3.1 wolves for 15 packs in central Wisconsin. Twelve wolves (3.6 %) were detected as loners, but lone wolves were probably undercounted in the wolf survey.

Figure 2 illustrates the changes in the wolf population over the last 24 years. The 2002 count was listed as 323 last year (Wydeven and Wiedenhoeft 2002), but has been adjusted to 327 after

additional information was collected. Thus, the increase from 2002 to 2003 was 2.4 %, much lower than the average increase of 18 % observed since 1985, when only 15 wolves occurred in the state. The low increase in 2003 may be due to poor snow tracking conditions in winter 2002-2003, high mortality from sarcoptic mange and illegal kills, or perhaps the population approaching carrying capacity.

Pack activity in northeast Wisconsin increased substantially in 2003, partially due to establishment of translocated depredating wolves released in north-central Wisconsin that moved eastward. These translocations will rarely be used with the new federal reclassification of wolves allowing euthanizing of depredating wolves.

Sixty dead wolves were detected in Wisconsin in 2002, including 15 Wisconsin radio collared wolves, and 5 Michigan radio collared wolves (Table 3). Eighty-four wolves were monitored in the state by radio telemetry during portions of 2002, and 15 of these were found dead (18%). Of the 14 actively collared wolves, 3 were shot (21%), 2 trauma/vehicle collisions (14%), 1 capture related (7%), 3 disease (21%), 2 malnutrition (14%), 1 drowning (7%), 1 other wolves (7%), and 1 unknown (7%). The total of all dead wolves included 24 trauma/vehicle collisions (40%), 15 shootings (25%), 1 capture related (2%), 6 (10%) mange and related conditions, 1 parvovirus (2%), 1 distemper (2%), 1 other disease (2%), 3 malnutrition/starvation (5%), 3 other wolves (5%), 1 drowning (2%), 4 unknown (7%). Overall mortality on wolves included 40 human caused mortalities (67%) and on actively collared wolves included 43% human caused mortalities. Collared wolves represent a less biased assessment of overall mortality, while total dead wolves are biased toward human causes, especially vehicle collision. Mortality rate due to shooting was similar for both samples. Shooting rates appear to be fairly high, but vehicle collisions were also high, especially in nontraditional wolf range. Mange continued to be an important mortality factor in Wisconsin.

Wolf observations classified as "possible" or "probable" were received from 38 Wisconsin counties in 2002 (Table 4). Total wolf observations in 2002 were 355 wolf reports compared to 295 in 2001, and 189 in 2000. Most observations were for counties with known packs and highest observations were for Vilas (42), Iron (39), Bayfield (36), and Douglas (34). Wolf reports in other counties probably represent lone dispersing wolves, and some wolf reports may represent misidentifications of coyotes, dogs or wolf-dog hybrids.

The wolf count in Wisconsin included 328 to 346 wolves outside of Indian reservations. Because this is the 2<sup>nd</sup> year at the state delisting goal of 250 wolves outside of Indian reservations in the state, state delisting will occur soon. The wolf population is also getting close to the state management goal of 350 wolves outside of Indian reservations.

Federal reclassification to threatened status was finalized for Wisconsin and the other states within the Eastern Distinct Population Segment on April 1, 2003. Therefore wolves depredating on domestic animals can now be euthanized in Wisconsin. On April 1, 2003, the U.S. Fish and Wildlife Service also announced plans to start the process for federal delisting of the Eastern Distinct Population Segment of gray wolves, including wolves in Wisconsin.

Federal delisting from both threatened and endangered status is possible after 100 wolves have existed in Wisconsin and Michigan for 5+ years, at the same time that a stable population occurs in Minnesota. The U.S. Fish and Wildlife Service will probably begin the delisting process in early 2004 and perhaps complete the process in 2005. Federal delisting will be necessary before all aspects of the 1999 Wisconsin Wolf Management Plan can be implemented.

## **Acknowledgments**

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 Table 1. Minimum estimation of Wisconsin's timber wolf population in winter 2002-2003.

Pack/Area/Wolf	Counties	Blocks	# of Wolves	Evidence <sup>a</sup>
NORTHERN FOREST	Counties	Diucks	# OI WOIVES	Evidence
Ada Lake	Langlade/Oconto	92	2	O
Alvin Creek*	Forest	97, 84	2	T
Augustine Lake*	Iron/Ashland	57	5	T
Averill Creek	Lincoln	48, 70	4-5	T
Bearsdale*	Bayfield/Sawyer	25	4	T
Beaverdam Lake*	Bayfield/Ashland	34	2-3	T
Bibbon Swamp*	Bayfield	28	8	T/O
Bird Sanctuary	Douglas	3, 9	5	R/T/O
Black Lake*	Ashland/Sawyer	24, 37, 38	4-5	R/T
Blue Hills	Rusk/Sawyer	20	2	T
Bootjack Lake*	Price/Oneida	53, 51, 52	7-8	R/T
Brush Creek*	Ashland	36, 57	7	R/T
Butler Rock*	Oconto/Marinette	104	2	R/T
Camp 6*	Forest	102	2	T
Casey Creek	Douglas	6, 7	5	T/O
Chain Lake*	Douglas/Washburn	8, 23	5	R/T
Chippewa River	Ashland/Iron	56, 58	6	R/O
Crex Meadow*	Burnett/Pine	13	3	R/T
Crotte Creek*	Douglas	9, 3, 2, 11	2	T
Dunbar*	Florence/Marinette	108	4-5	T/O
Eastside Firelane	Ashland	56, 57	3	O
Echo Valley*	Bayfield	33	4	T
Eddy Creek(R)	Sawyer	20, 42	2	T
Escanaba Lake	Vilas	80	2	T/O
Flag River	Bayfield	31, 32	4	R/?
Ghost Lake*	Bayfield/Sawyer	24, 29	3-5	T/O
Giant Pine*	Forest	85	3	T
Harrison Hills*	Lincoln	71, 75	2	R/T/O
Haystack Corner	Sawyer/Rusk	43	5	T
Hellhole Creek*	Bayfield/Ashland	35, 36	5	R/T/O
Hoffman Lake*	Iron/Price/Ashland	55, 54	5	R/T/O
Hungry Run*	Ashland	38, 40	4-5	T
Ino Swamp	Bayfield	27	5	T
Johnson Springs	Forest	94	2	?
Kidrick Swamp*	Taylor/Price	46, 47	4	T
Lake Nebagamon	Douglas	6	5	T
Lake Noquebay	Marinette	113,114	2	O
Little Rice River*	Oneida	51, 67, 65	6	R/T
Log Creek*	Sawyer	40, 37	4-5	T
Long Lake*	Rusk	126	2	R/T

Table 1. cont.				
Pack/Area/Wolf	Counties	Blocks	# of Wolves	<b>Evidence</b> <sup>a</sup>
Mondeaux Flowage*	Taylor	47	2	T
Moose Lake	Douglas	4	6	T/O
Moquah	Bayfield	30	3	R/T
Moreland Lake*	Bayfield	26	5	T
Morgan Lake	Florence/Forest	100	2+	T
Morrison Creek(R)	Ashland/Iron	39, 60	3	O
Murray's Landing	Iron	55	4-6	T/O
Nineweb Lake*	Vilas	80, 81	2	T
North Empire	Douglas	2, 3, 4	5	T/O
North Willow*	Oneida	65, 67, 78	7	R/T/O
O'Brien Lake*	Iron	57, 59	3	T
Oconto River	Oconto	131	3	R/O
Orienta Falls*	Bayfield/Douglas	7, 31	2	T
Pelican Lake	Oneida	76, 71	2	R/O
Pine Lake	Iron	58, 59, 61	3+	R/T/O
Pokegama River*	Douglas	1	2	T
Poplar River	Douglas	7	2	T/O
Porcupine Lake*	Bayfield	29,35,34	3+	R/T
Price Creek	Price/Sawyer	41, 44	3	T
Rainbow Lake*	Bayfield	27, 28	4	T
Ranger Island	Lincoln	69	4	R/T
Riverside	Burnett	10	2	T
Round Lake	Sawyer	24, 37, 42	2	R
Shanagolden*	Ashland	38	3	T
Shoberg Lake*	Douglas	6, 8	3-4	T/O
Skinner Creek*	Price	44	3-4	T
Smoky Hill*	Bayfield	25	3	T
Somo River	Lincoln	68	4	R/T
South Empire*	Douglas	3, 4	3	T
Spirit Lake*	Lincoln/Taylor/Price	49, 70	6	T
Spring Creek	Price	44	2	T/O
Stella Lake	Oneida	77	3	R/O
Sterling Barrens	Polk/Burnett	14	3	T
Thornapple River	Sawyer	41, 40	6	T
Torch River*	Ashland/Sawyer	38, 37, 36	5-6	R/T
Tranus Lake*	Washburn	22, 23	2	T
Truck Trail*	Douglas/Pine	2	3	R/T
Tupper Creek*	Sawyer	42, 43	2	T
West Firelane(R)	Ashland/Iron	39, 60	2	R/T

158

280-294+

**Total Northern Pack Members** 

**79 Packs = 3.5-3.7 wolves/pack** 

Pack/Area/Wolf	Counties	Blocks	# of Wolves	Evidence
Dispersers & Loners	Countres	Biocks	11 01 11 01105	Lvidence
Bearskin	Oneida	78	1	T
Laona Forest	Forest	93	1	T
Martha Lake	Iron	62	1	T
Miles Lake	Iron	54	1	T
Moose Road	Douglas/Pine	11	1	T
Siskiwit Lake*	Bayfield	32, 33, 30	1	R/T/O
S. Island Lake	Bayfield	26	1	T
Spencer Lake	Burnett/Barron/Polk	17	1	T
Stuntz Brook	Washburn	12	1	T
W446F	Douglas/Washburn		1	R
W460F	Washburn/Polk	19	1	R
Total Northern Loners			11	
Total Northern Wolves			291-305	
CENTRAL FOREST				
Bear Bluff*	Jackson/Wood/Juneau	121, 120, 119	5-6	R/T
Colburn*	Adams	127	2	T
Dead Creek	Jackson/Juneau	121	2-4	T
Eau Claire River	Clark/Eau Claire	117	2	T
Ft. McCoy*	Monroe	123	5	R/T/O
Iron Run*	Clark	117, 118	4	R/T/O
Mead	Marathon	133	2	O
Noch Hanai	Jackson/Clark	119	2	T
Rattail	Juneau	122, 125	2	R/T
Seneca	Wood	124, 125	2	R/T
Silo	Juneau	122	5	T
South Bluff*	Wood	121	2	T
Suk-Cerney*	Juneau	122	2-3	R/T
Wedges Creek	Clark	118	2	T
Wildcat Mound*	Jackson	120, 121	4	R/T
Total Central Pack Members			43-47	
15 Packs = 2.9-3.1 wolves/pacl	ζ.			
Dispersers & Loners				
Buena Vista	Wood/Adams		1	T
Total Central Loners			1	
Total Central Wolves		44-48		
Grand Total All Wolves	335-353	<sup>a</sup> Evidence	O = observations	
<b>Indian Reservation Wolves</b>	7	R = radio-telemetry surveys		
<b>Wolves Outside Reservation</b>	ns <u>328-346</u>	T = track and sign surveys		
Fotal Packs 94 *Pack with probable br			broadin	

Table 2. Wolf pack territories 2002-2003. (mapped in Figure 1)

Northern Forest	Table 2. Wen pack				# of	Area
Ada Lake         71         Approx. b         None         None         NE           Alvin Creek         73         Approx.         None         None         NE           Augustine Lake         56         1999         229         -         60           Averill Creek         64         2003         433         29         38           Bearsdale         21         Approx.         None         None         None         NE           Bibbon Swamp         25         Approx.         None         None         None         NE           Bird Sanctuary         11         2003         447         42         28           Black Lake         34         2003         370         48         61           Blue Hills         16         Approx.         None         None         None         None           Botjack Lake         52         2003         336         46         155           Brush Creek         33         2002         310         -         55           Butler Rock         76         2003         432         19         51           Camp 6         75         Approx.         None         None	Pack Name	Map #	Year <sup>a</sup>	Collared Wolves	Locations	(sq.mi.)
Alvin Creek         73         Approx.         None         NE           Augustine Lake         56         1999         229         -         60           Averill Creek         64         2003         433         29         38           Bearsdale         21         Approx.         None         None         NE           Bibbon Swamp         25         Approx.         None         None         NE           Bibdon Swamp         25         Approx.         None         None         NE           Bird Sanctuary         11         2003         447         42         28           Black Lake         34         2003         370         48         61           Blue Hills         16         Approx.         None         None         None           Bootjack Lake         52         2003         336         46         155           Brush Creek         33         2002         310         -         55           Butler Rock         76         2003         432         19         51           Casey Creek         8         Approx.         None         None         None           Chain Lake         18			, b	2.7	3.7	2.150
Augustine Lake         56         1999         229         -         60           Averill Creek         64         2003         433         29         38           Bearsdale         21         Approx.         None         None         NE           Beaver Dam Lake         31         Approx.         None         None         NE           Bibbon Swamp         25         Approx.         None         None         NE           Bird Sanctuary         11         2003         447         42         28           Black Lake         34         2003         370         48         61           Blue Hills         16         Approx.         None         None         Ne           Botjack Lake         52         2003         336         46         155           Brush Creek         33         2002         310         -         55           Butler Rock         76         2003         432         19         51           Camp 6         75         Approx.         None         None         Ne           Casey Creek         8         Approx.         None         None         Ne           Chain Lake						
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Bearsdale         21         Approx.         None         None         NE           Beaver Dam Lake         31         Approx.         None         None         NE           Bibbon Swamp         25         Approx.         None         None         NE           Bird Sanctuary         11         2003         447         42         28           Black Lake         34         2003         370         48         61           Blue Hills         16         Approx.         None         None         NE           Botjack Lake         52         2003         336         46         155           Brush Creek         33         2002         310         -         55           Bruther Rock         76         2003         432         19         51           Camp 6         75         Approx.         None         None         None         None           Casey Creek         8         Approx.         None	•				-	
Beaver Dam Lake         31         Approx.         None         None         NE           Bibbon Swamp         25         Approx.         None         None         NE           Bird Sanctuary         11         2003         447         42         28           Black Lake         34         2003         370         48         61           Blue Hills         16         Approx.         None         None         NE           Bootjack Lake         52         2003         336         46         155           Brush Creek         33         2002         310         -         55           Butler Rock         76         2003         432         19         51           Camp 6         75         Approx.         None         None         Ne           Casey Creek         8         Approx.         None         None         NE           Chain Lake         18         2003         291         51         102           Chippewa River         57         2003         351         51         62           Crex Meadows         14         2003         388         54         105           Crotte Creek						
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Blue Hills         16         Approx.         None         None         NE           Bootjack Lake         52         2003         336         46         155           Brush Creek         33         2002         310         -         55           Butler Rock         76         2003         432         19         51           Camp 6         75         Approx.         None         None         NE           Casey Creek         8         Approx.         None         None         NE           Chain Lake         18         2003         291         51         102           Chippewa River         57         2003         351         51         62           Crex Meadows         14         2003         388         54         105           Crotte Creek         12         2002         296         -         51           Dunbar         94         Approx.         None         None         Ne           Eastside Firelane         55         Approx.         None         None         Ne           Eddy Creek         44         Approx.         None         None         Ne           Eddy Creek	-					
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Camp 6         75         Approx.         None         None         NE           Casey Creek         8         Approx.         None         None         NE           Chain Lake         18         2003         291         51         102           Chippewa River         57         2003         351         51         62           Crex Meadows         14         2003         388         54         105           Crotte Creek         12         2002         296         -         51           Dunbar         94         Approx.         None         None         None           Eastside Firelane         55         Approx.         None         None         NE           Echo Valley         30         Approx.         None         None         NE           Eddy Creek         44         Approx.         None         None         NE           Eddy Creek         44         Approx.         None         None         NE           Flag River         28         2003         438, 439         92         75           Giant Pine         70         2003         458         27         45           Ghost Lake					-	
Casey Creek         8         Approx.         None         None         NE           Chain Lake         18         2003         291         51         102           Chippewa River         57         2003         351         51         62           Crex Meadows         14         2003         388         54         105           Crotte Creek         12         2002         296         -         51           Dunbar         94         Approx.         None         None         NE           Eastside Firelane         55         Approx.         None         None         NE           Echo Valley         30         Approx.         None         None         NE           Eddy Creek         44         Approx.         None         None         NE           Eddy Creek         44         Approx.         None         None         NE           Escanaba Lake         68         Approx.         None         None         NE           Flag River         28         2003         438, 439         92         75           Giant Pine         70         2003         458         27         45           Ghost Lake						
Chain Lake         18         2003         291         51         102           Chippewa River         57         2003         351         51         62           Crex Meadows         14         2003         388         54         105           Crotte Creek         12         2002         296         -         51           Dunbar         94         Approx.         None         None         Ne           Eastside Firelane         55         Approx.         None         None         Ne           Echo Valley         30         Approx.         None         None         Ne           Eddy Creek         44         Approx.         None         None         Ne           Eddy Creek         44         Approx.         None         None         Ne           Escanaba Lake         68         Approx.         None         None         Ne           Flag River         28         2003         438, 439         92         75           Giant Pine         70         2003         458         27         45           Ghost Lake         19         2002         241, 250         -         74           Harrison Hil	-		Approx.			
Chippewa River         57         2003         351         51         62           Crex Meadows         14         2003         388         54         105           Crotte Creek         12         2002         296         -         51           Dunbar         94         Approx.         None         None         NE           Eastside Firelane         55         Approx.         None         None         NE           Echo Valley         30         Approx.         None         None         NE           Eddy Creek         44         Approx.         None         None         NE           Eddy Creek         44         Approx.         None         None         NE           Escanaba Lake         68         Approx.         None         None         NE           Flag River         28         2003         438, 439         92         75           Giant Pine         70         2003         458         27         45           Ghost Lake         19         2002         241, 250         -         74           Harrison Hills         65         2003         246, 300         50         49           Hays	-					
Crex Meadows         14         2003         388         54         105           Crotte Creek         12         2002         296         -         51           Dunbar         94         Approx.         None         None         NE           Eastside Firelane         55         Approx.         None         None         NE           Echo Valley         30         Approx.         None         None         NE           Eddy Creek         44         Approx.         None         None         NE           Escanaba Lake         68         Approx.         None         None         NE           Flag River         28         2003         438, 439         92         75           Giant Pine         70         2003         458         27         45           Ghost Lake         19         2002         241, 250         -         74           Harrison Hills         65         2003         246, 300         50         49           Haystack Corner         46         Approx.         None         None         NE           Hellhole Creek         32         2003         444         42         55 <td< td=""><td></td><td>18</td><td></td><td></td><td></td><td>102</td></td<>		18				102
Crotte Creek         12         2002         296         -         51           Dunbar         94         Approx.         None         None         NE           Eastside Firelane         55         Approx.         None         None         None           Echo Valley         30         Approx.         None         None         None           Eddy Creek         44         Approx.         None         None         None           Escanaba Lake         68         Approx.         None         None         None           Flag River         28         2003         438,439         92         75           Giant Pine         70         2003         458         27         45           Ghost Lake         19         2002         241,250         -         74           Harrison Hills         65         2003         246,300         50         49           Haystack Corner         46         Approx.         None         None         Ne           Hellhole Creek         32         2003         444         42         55           Hoffman Lake         54         2003         459         21         51	Chippewa River	57			51	62
Dunbar         94         Approx.         None         None         NE           Eastside Firelane         55         Approx.         None         None         NE           Echo Valley         30         Approx.         None         None         NE           Eddy Creek         44         Approx.         None         None         NE           Escanaba Lake         68         Approx.         None         None         NE           Flag River         28         2003         438, 439         92         75           Giant Pine         70         2003         458         27         45           Ghost Lake         19         2002         241, 250         -         74           Harrison Hills         65         2003         246, 300         50         49           Haystack Corner         46         Approx.         None         None         NE           Hellhole Creek         32         2003         444         42         55           Hoffman Lake         54         2003         459         21         51           Hungry Run         38         Approx.         None         None         None	Crex Meadows	14	2003	388	54	105
Eastside Firelane         55         Approx.         None         None         NE           Echo Valley         30         Approx.         None         None         NE           Eddy Creek         44         Approx.         None         None         NE           Escanaba Lake         68         Approx.         None         None         NE           Flag River         28         2003         438, 439         92         75           Giant Pine         70         2003         458         27         45           Ghost Lake         19         2002         241, 250         -         74           Harrison Hills         65         2003         246, 300         50         49           Haystack Corner         46         Approx.         None         None         NE           Hellhole Creek         32         2003         444         42         55           Hoffman Lake         54         2003         459         21         51           Hungry Run         38         Approx.         None         None         None           Ino Swamp         24         Approx.         None         None         None	Crotte Creek	12	2002	296	-	51
Echo Valley         30         Approx.         None         None         NE           Eddy Creek         44         Approx.         None         None         NE           Escanaba Lake         68         Approx.         None         None         NE           Flag River         28         2003         438, 439         92         75           Giant Pine         70         2003         458         27         45           Ghost Lake         19         2002         241, 250         -         74           Harrison Hills         65         2003         246, 300         50         49           Haystack Corner         46         Approx.         None         None         NE           Hellhole Creek         32         2003         444         42         55           Hoffman Lake         54         2003         459         21         51           Hungry Run         38         Approx.         None         None         NE           Ino Swamp         24         Approx.         None         None         None           Johnson Springs         72         Approx.         None         None         None	Dunbar	94	Approx.	None	None	NE
Eddy Creek         44         Approx.         None         None         NE           Escanaba Lake         68         Approx.         None         None         NE           Flag River         28         2003         438, 439         92         75           Giant Pine         70         2003         458         27         45           Ghost Lake         19         2002         241, 250         -         74           Harrison Hills         65         2003         246, 300         50         49           Haystack Corner         46         Approx.         None         None         NE           Hellhole Creek         32         2003         444         42         55           Hoffman Lake         54         2003         459         21         51           Hungry Run         38         Approx.         None         None         NE           Ino Swamp         24         Approx.         None         None         NE           Johnson Springs         72         Approx.         None         None         None           Kidrick Swamp         49         Approx.         None         None         None	Eastside Firelane	55	Approx.	None	None	NE
Escanaba Lake         68         Approx.         None         None         NE           Flag River         28         2003         438, 439         92         75           Giant Pine         70         2003         458         27         45           Ghost Lake         19         2002         241, 250         -         74           Harrison Hills         65         2003         246, 300         50         49           Haystack Corner         46         Approx.         None         None         NE           Hellhole Creek         32         2003         444         42         55           Hoffman Lake         54         2003         459         21         51           Hungry Run         38         Approx.         None         None         NE           Ino Swamp         24         Approx.         None         None         NE           Johnson Springs         72         Approx.         None         None         Ne           Kidrick Swamp         49         Approx.         None         None         None	Echo Valley	30	Approx.	None	None	NE
Flag River         28         2003         438, 439         92         75           Giant Pine         70         2003         458         27         45           Ghost Lake         19         2002         241, 250         -         74           Harrison Hills         65         2003         246, 300         50         49           Haystack Corner         46         Approx.         None         None         NE           Hellhole Creek         32         2003         444         42         55           Hoffman Lake         54         2003         459         21         51           Hungry Run         38         Approx.         None         None         NE           Ino Swamp         24         Approx.         None         None         NE           Johnson Springs         72         Approx.         None         None         Ne           Kidrick Swamp         49         Approx.         None         None         None	Eddy Creek	44	Approx.	None	None	NE
Giant Pine         70         2003         458         27         45           Ghost Lake         19         2002         241, 250         -         74           Harrison Hills         65         2003         246, 300         50         49           Haystack Corner         46         Approx.         None         None         NE           Hellhole Creek         32         2003         444         42         55           Hoffman Lake         54         2003         459         21         51           Hungry Run         38         Approx.         None         None         NE           Ino Swamp         24         Approx.         None         None         NE           Johnson Springs         72         Approx.         None         None         Ne           Kidrick Swamp         49         Approx.         None         None         None	Escanaba Lake	68	Approx.	None	None	NE
Ghost Lake         19         2002         241, 250         -         74           Harrison Hills         65         2003         246, 300         50         49           Haystack Corner         46         Approx.         None         None         NE           Hellhole Creek         32         2003         444         42         55           Hoffman Lake         54         2003         459         21         51           Hungry Run         38         Approx.         None         None         NE           Ino Swamp         24         Approx.         None         None         NE           Johnson Springs         72         Approx.         None         None         NE           Kidrick Swamp         49         Approx.         None         None         Ne	Flag River	28	2003	438, 439	92	75
Harrison Hills         65         2003         246, 300         50         49           Haystack Corner         46         Approx.         None         None         NE           Hellhole Creek         32         2003         444         42         55           Hoffman Lake         54         2003         459         21         51           Hungry Run         38         Approx.         None         None         NE           Ino Swamp         24         Approx.         None         None         NE           Johnson Springs         72         Approx.         None         None         NE           Kidrick Swamp         49         Approx.         None         None         NE	Giant Pine	70	2003	458	27	45
Haystack Corner46Approx.NoneNoneNEHellhole Creek3220034444255Hoffman Lake5420034592151Hungry Run38Approx.NoneNoneNEIno Swamp24Approx.NoneNoneNEJohnson Springs72Approx.NoneNoneNEKidrick Swamp49Approx.NoneNoneNE	Ghost Lake	19	2002	241, 250	-	74
Hellhole Creek         32         2003         444         42         55           Hoffman Lake         54         2003         459         21         51           Hungry Run         38         Approx.         None         None         NE           Ino Swamp         24         Approx.         None         None         NE           Johnson Springs         72         Approx.         None         None         NE           Kidrick Swamp         49         Approx.         None         None         Ne	Harrison Hills	65	2003	246, 300	50	49
Hoffman Lake5420034592151Hungry Run38Approx.NoneNoneNEIno Swamp24Approx.NoneNoneNEJohnson Springs72Approx.NoneNoneNEKidrick Swamp49Approx.NoneNoneNE	Haystack Corner	46	Approx.	None	None	NE
Hungry Run38Approx.NoneNoneNEIno Swamp24Approx.NoneNoneNEJohnson Springs72Approx.NoneNoneNEKidrick Swamp49Approx.NoneNoneNE	Hellhole Creek	32	2003	444	42	55
Ino Swamp24Approx.NoneNoneNEJohnson Springs72Approx.NoneNoneNEKidrick Swamp49Approx.NoneNoneNE	Hoffman Lake	54	2003	459	21	51
Johnson Springs72Approx.NoneNoneNEKidrick Swamp49Approx.NoneNoneNE	Hungry Run	38	Approx.	None	None	NE
Kidrick Swamp 49 Approx. None None NE	Ino Swamp	24	Approx.	None	None	NE
1	Johnson Springs	72	Approx.	None	None	NE
7 2002	Kidrick Swamp	49	Approx.	None	None	NE
Lake Nebagamon / 2003 440 29 36	Lake Nebagamon	7	2003	440	29	36
Lake Noquebay 78 Approx. None None NE	Lake Noquebay	78	Approx.	None	None	NE
Little Rice River 61 2003 355 52 61		61		355	52	61
Log Creek 39 2002 286 - 42	Log Creek	39	2002	286	-	42
Long Lake 80 2003 393 41 15	~	80			41	15
Mondeaux Flowage 50 2003 441 15 37	_				15	
Moose Lake 5 2003 434 34 13	•					
Moquah 27 2003 431 45 70						
Moreland Lake 22 Approx. None None NE	-					
Morgan Lake 74 Approx. None None NE						

Table 2. cont.

				# of	Area
Pack Name	Map#	Year <sup>a</sup>	Collared Wolves	Locations	(sq.mi.)
Morrison Creek	41	Approx.	None	None	NE
Murray's Landing	53	Approx.	None	None	NE
Nineweb Lake	69	2000	318	-	136
North Empire	3	2000	298	-	20
North Willow	60	2003	437, 461	50	63
O'Brien Lake	59	Approx.	None	None	NE
Oconto River	79	2003	435,443,449,450,452,453,454	228	98
Orienta Falls	9	Approx.	None	None	NE
Pelican Lake	66	2003	332	52	34
Pine Lake	58	2003	448	48	83
Pokegama River	1	Approx.	None	None	NE
Poplar River	10	Approx.	None	None	NE
Porcupine Lake	26	2003	241	46	132
Price Creek	43	2001	368	-	29
Rainbow Lake	23	1996	255	-	51
Ranger Island	63	2003	285	44	26
Riverside	13	Approx.	None	None	NE
Round Lake	35	2003	457	7	12
Shanagolden	37	Approx.	None	None	NE
Shoberg Lake	6	1999	290	-	55
Siskiwit Lake	29	2003	369	49	45
Skinner Creek	47	Approx.	None	None	NE
Smoky Hill	20	1998	259	-	63
Somo River	62	2003	456	23	85
South Empire	4	2003	297	40	57
Spirit Lake	51	Approx.	None	None	NE
Spring Creek	48	Approx.	None	None	NE
Stella Lake	67	2003	376	53	16
Sterling Barrens	15	Approx.	None	None	NE
Thornapple River	42	1997	239	-	42
Torch River	36	2003	248	50	61
Tranus Lake	17	2002	292	-	48
Truck Trail	2	2003	268	25	53
Tupper Creek	45	1998	276	-	53
West Firelane	40	2003	036	50	37
Central Forest					
Bear Bluff	86	2003	311,338,405,406,407,408,426	129	58
Colburn	94	Approx.	None	None	NE
Dead Creek	88	2001	348	-	25
Eau Claire River	81	Approx.	None	None	NE
Ft. McCoy	92	Approx.	None	None	NE
Iron Run	82	2003	309	41	43
Mead Wildlife Area	95	Approx.	None	None	NE
Noch Hanai	84	2001	269	_	38
Rattail	89	2003	340	42	50
Seneca	93	2003	341,343	82	77

Table 2. cont.

				# of	Area
Pack Name	Map #	Year <sup>a</sup>	Collared Wolves	Locations	(sq.mi.)
Silo	91	Approx.	None	None	NE
South Bluff	87	Approx.	None	None	NE
Suk Cerney	90	2003	349, 427, 442	62	39
Wedges Creek	83	Approx.	None	None	NE
Wildcat Mound	85	2003	409,410,420,421,429	91	84

<sup>&</sup>lt;sup>a</sup>Based on available radio locations

<sup>&</sup>lt;sup>b</sup>Territory boundaries <sup>c</sup>No estimate.

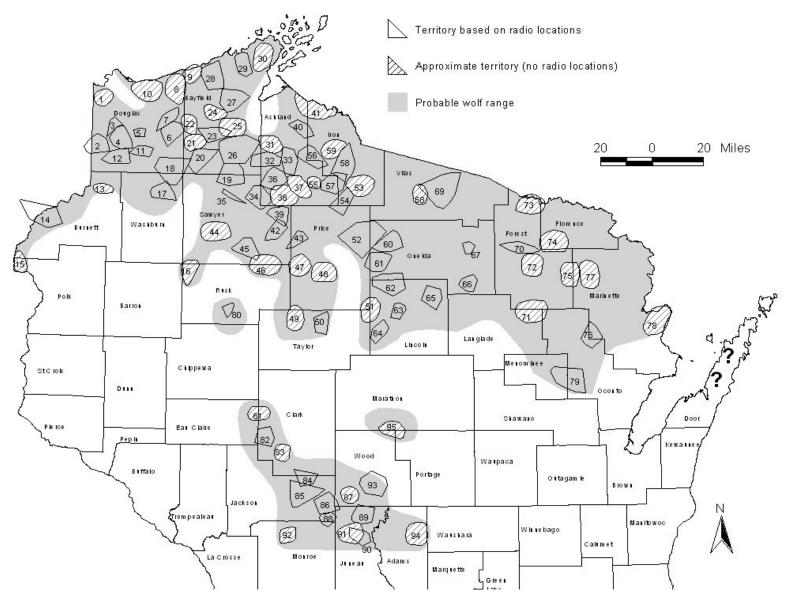


Figure 1. Gray Wolf Distribution in Wisconsin: Winter 2002-2003 (numbers refer to Table 2)

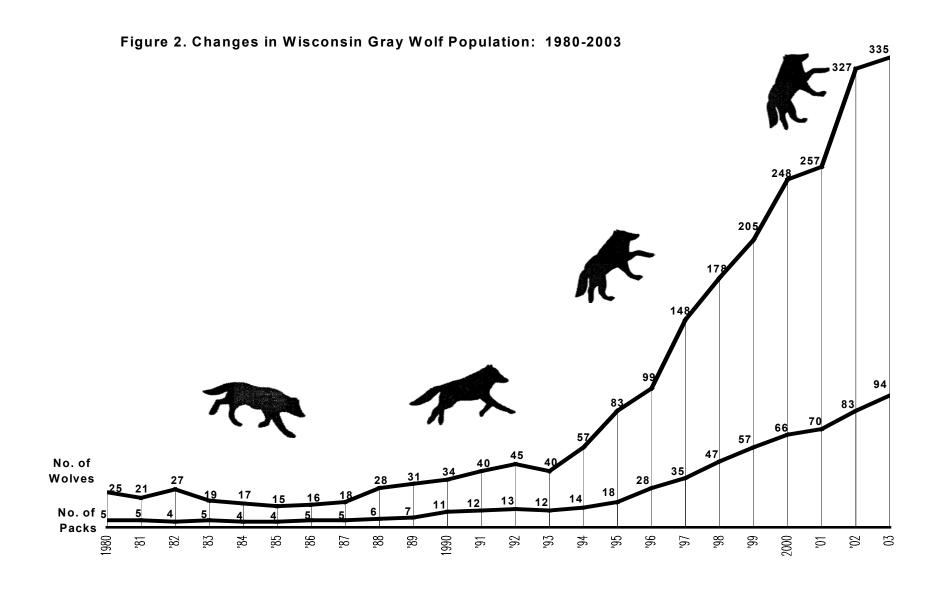


 Table 3. Wolf mortality in Wisconsin in 2002.

Date	Wolf Number	Age/Sex	County	Cause	Pack
01/03/02	W367	ΑF	Douglas	Disease/Other wolves?	Chase Brook
01/08/02	W316	A F	Price	Trauma/Emaciation	Wintergreen/Loner
01/10/02		Y M	Adams	Shot?	None known
01/10/02		Y ?	Juneau	Vehicle Collision/Shot	Disperser?
01/12/02		??	Bayfield	Mange?	Smoky Hill
01/19/02	M0068	Y M	Waupaca	Vehicle collision	Disperser
01/22/02		A M	Sawyer	Vehicle collision	None known
02/04/02	M3608	A M	Florence	Shot/Mange?	Disperser
02/07/02	W286	4YrF	Sawyer	Mange/Other wolves?	Brunet River
02/11/02		A F	Oneida	Shot(bow)/Mange	Giant Pine?
02/17/02	M0179	A M	Menominee	Vehicle collision?	Disperser
02/24/02		A M	Oneida	Vehicle collision	Disperser
03/07/02		A?M	Ashland	Vehicle collision	Chippewa River
03/26/02		A F	Douglas	Vehicle collision	Disperser
04/03/02		AM	Dane	Vehicle collision	Disperser
04/05/02		PF	Juneau	Mange?	Suk Cerney
04/09/02	M711	AM	Marinette	Shot?	Disperser
04/24/02		??	Marquette	Shot	Disperser/Hybrid?
05/10/02		YF	Oneida	Vehicle collision	Somo River
05/15/02		??	Taylor	?	Kidrick Swamp
05/20/02	W296	4YrM	Douglas	Shot	Crotte Creek
05/24/02		YM	Washburn	Vehicle collision	Unknown
05/24/02		YM	Oconto	Vehicle collision	Disperser
05/24/02		AM	Bayfield	Other wolves?	Siskiwit Lake
05/29/02	W292	4YrM	Washburn	Other wolves	Tranus Lake
06/13/02		AM	Washburn	Vehicle collision	Stuntz Brook
07/02/02	W295	4YrF	Bayfield	Capture related?	Translocated
07/03/02	W430	AM	Price	?	Translocated
07/04/02		PF	Lincoln	Vehicle collision	Averill Creek
07/15/02	W404	PM	Juneau	Distemper	Suk Cerney
07/18/02		PM	Langlade	Parvo-virus	Deerbrook
07/25/02		Y?M	Washburn	?	?

Table 3. cont.

Date	Wolf Number	Age/Sex	County	Cause	Pack
07/26/02		PF	Ashland	Vehicle collision	Torch River
07/26/02		PF	Ashland	Vehicle collision	Torch River
07/29/02		PM	Iron	Mange?	Hoffman Lake
07/31/02		YF	Douglas	Vehicle collision	?
08/01/02	W401	PM	Juneau	Malnutrition/Mange	Suk Cerney
08/01/02		PF	Iron	Starvation	O'Brien Lake
08/03/02		PM	Bayfield	Vehicle collision	Siskiwit Lake
08/03/02		AF	Washburn	Vehicle collision	Chain Lake
08/04/02		PF	Bayfield	Vehicle collision	Siskiwit Lake
08/05/02	W250	2YrM	Douglas	?	Bird Sanctuary
08/20/02		PM	Bayfield	Vehicle collision	Siskiwit Lake
08/27/02	M6606	AM	Langlade	Shot	MI wolf
09/05/02	W349	PF	Juneau	Malnutrition/Mange	Suk Cerney
10/04/02		AM?	Marquette	Shot (bow)	Colburn?
10/17/02	W453	AM	Oconto	Vehicle collision	Translocated
10/24/02		P?	Clark	Mange?	Iron Run
10/25/02		P?M	Bayfield	Other wolves?/Mange?	Moreland Lake
10/30/02		PF	Burnett	Shot	Crex Meadow
11/05/02		AM	Marquette	Vehicle collision	Disperser?
11/12/02		YF	Ashland	Shot?	W. Firelane?
11/14/02		P?	Clark	Mange?	Iron Run
11/24/02		PM	Juneau	Shot	Suk Cerney
11/24?/02		??	Sawyer	Shot	Price Creek
11/27/02	W437	AF	Oneida	Drowned	North Willow
11/27/02	W300	AF	Lincoln	Shot	Harrison Hills
11/30/02		AM	St. Croix	Shot	Disperser?
12/02/02	W441	YF	Taylor	Shot	Mondeaux Flowage
12/10/02		AM	Douglas	Vehicle collision	Disperser?
12/14/02		AM	Florence	Vehicle collision	MI wolf?

Of 60 mortalities detected, 5 were Michigan collared wolves, 15 were Wisconsin collared wolves.

**Table 4.** Probable and possible wolf observations reported by natural resource agency personnel and private citizens in Wisconsin, 2002.

	Number of		Track or Sign	Total Wolf
County	Sightings	Wolves Seen	<b>Observations</b>	<b>Observations</b>
Adams	1	2	1	2
Ashland*	21	37-38	12	33
Barron*	1	2	0	1
Bayfield*	26	69-73	10	36
Brown	1	2	0	1
Burnett*	4	4	0	4
Clark*	2	9	4	6
Dane	5	7	0	5
Door	4	5-6	0	4
Douglas*	28	62	6	34
Florence*	13	16	1	14
Fond du Lac	2	2	0	2
Forest*	2	2	1	3
Iowa	0	0	1	1
Iron*	25	59	14	39
Jackson*	4	4	0	4
Juneau*	1	6	1	2
Langlade*	17	20	1	18
Lincoln*	7	17	5	12
Marathon	1	1	0	1
Menominee	1	4	0	1
Oconto	6	7	2	8
Oneida*	11	12	7	18
Outagamie	1	1	0	1
Polk*	2	4	1	3
Portage	2	2	1	3
Price*	8	21	10	18
Rock	0	0	1	1
Rusk*	1	1	2	3
Sauk	1	1	0	1
Sawyer*	4	8	4	8
Shawano	3	4	0	3
St. Croix	1	1	0	1
Taylor*	1	2	5	6
Vilas*	34	43	8	42
Washburn*	13	34	1	14
Waupaca	0	0	1	1
Wood*	1	1	0	1
Total	255	472-478	100	355

<sup>\*</sup>Counties believed to have packs with breeding activity in 2002. Marinette and Monroe counties were also believed to have packs with breeding activity.